



Department of Energy
Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221

ENTERED

JUN 25 2004



Mr. Steve Zappe, WIPP Project Leader
Hazardous Waste Permits Program
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2905 E. Rodeo Park Drive, Bldg. 1
Santa Fe, NM 87505

Subject: Transmittal of Approved Change Notice Number 2 for Rocky Flats
Environmental Technology Site Waste Stream Profile Form Number
RF001.01 TRU Combustible and Plastic Wastes.

Dear Mr. Zappe:

The Carlsbad Field Office (CBFO) has approved the change notice number 2 for Rocky Flats Environmental Technology Site (RFETS), Waste Stream Profile Form RF001.01. Enclosed is a copy of the approved form as required by Section B-4(b)(1) of the WIPP Hazardous Waste Facility Permit No. NM4890139088-TSDF.

If you have any questions on this matter, please contact me at (505) 234-7357 or (505) 706-0066.

Sincerely,

Kerry W. Watson
CBFO Assistant Manager
Office of National TRU Program

Enclosure

cc: w/o enclosure
J. Kieling, NMED
C. Walker, TechLaw
M. Strum, WTS *ED
R. Chavez, WRES *ED
L. Greene, WRES *ED
S. Calvert, CTAC *ED
CBFO M&RC

*ED denotes Electronic Distribution



Update for WIPP Operating Record (Change Notice #2)

TRU Combustible and Plastic Wastes (RF001.01)

Please add the following information to the WIPP Operating Record for WSPF #RF001.01, Revision 1, as amended by WIPP operating record update dated December 10, 2002. This waste stream is TRU Combustible and Plastic Wastes and was approved by DOE/CBFO on July 3, 2000. Please update related files as you deem appropriate.

The Waste Stream Profile Form (WSPF) is being revised. The WSPF components are bolded. The updates are:

1. **Number of Drums:** Change to 3868
2. **Number of SWBs:** Change to 66

The Acceptable Knowledge (AK) Summary attachment to the WSPF is being revised. The AK Summary components are bolded. The updates are:

1. **Waste Stream Volume (Retrievably Stored):** Revised category to specify 3137 55-gallon drums and 26 SWBs.
2. **Waste Stream Volume (Newly Generated):** Added category to specify 690 55-gallon drums and 39 SWBs with dates of October 2001 - May 2004.
3. **Waste Stream Volume (Projected):** Revised to specify 41 55-gallon drums and 1 SWB with dates of May 2004 to October 2004.

TRU Combustible and Plastic Wastes: Added sentence about PK for flammable VOCs as follows: Process knowledge demonstrates flammable VOCs in headspace <500 ppm: Yes.

Generation Processes:

- Deleted Table 6-2 and changed first paragraph to read: Combustible and plastic wastes were generated by nearly every operation on site. A detailed description of the waste generating processes and their process flow diagrams can be found in the WSRIC Building Books or archived WSRIC files.

RCRA Characterization:

- Deleted Table 6-3 and changed first paragraph to read: This waste stream is NOT a mixed waste. The waste is generated from similar activities; is similar in material, physical form, and hazardous constituents; and is, therefore, considered a single waste stream. The specific BWR Baseline Book Subpopulations and WSRIC Process Numbers associated with the TRU Combustible and Plastic waste stream are listed in the WEMS AK Waste Stream Summary for Profile Number RF001.01.⁽⁶⁾
- Added paragraph added to indicate screening for prohibited items:

Visual examination of waste contents at the time of packaging and/or RTR is used to verify that the waste stream does not contain liquid waste, explosives, non- radionuclide pyrophoric materials, compressed gasses, or reactive waste. Therefore, this waste stream does not exhibit the characteristics of ignitability (D001), corrosivity (D002), or reactivity (D003).

- Paragraph added to indicate why no P015-listed waste even through beryllium was used at RFETS:

Beryllium parts were used in the manufacture/assembly of weapons components, and residual beryllium contamination of plutonium parts may have occurred. Combustibles and plastics associated with these operations may have been contaminated with beryllium and therefore, trace quantities (less

than one weight percent) of beryllium may be present in the waste stream. Any beryllium present is as a contaminant of the process and not as unused commercial chemical product, and therefore is not a P015-listed waste. Based on an evaluation of this waste and the processes that generated the waste, including chemical usage, this waste stream does not exhibit the characteristic of toxicity and was not mixed with any another listed waste.

- Paragraph added to describe differences between this waste stream and RFETS waste stored at INEEL

The combustible and plastic waste streams generated at RFETS and sent to the INEEL for storage have the same IDC but are considered different waste streams because of the EPA hazardous waste numbers assigned. The INEEL waste streams (Local ID Numbers ID-RFO-330T, ID-RFO-336T, and ID-RFO-337T) were generated and shipped to INEEL prior to the full implementation of RCRA and therefore, EPA hazardous waste numbers were assigned to each IDC as a whole.

Added Transportation paragraph as follows:

The payload containers in the waste stream must also comply with the TRUPACT-II Authorized Methods for Payload Control (TRAMPAC) requirements. Flammable volatile organic compounds (VOCs) were not identified in this waste stream based on the descriptions in the BWR Baseline Book and WSRIC Building Books, and headspace gas sampling and analysis. Therefore, flammable VOCs in the payload container headspace do not exceed 500 ppm.

Radionuclides: Deleted redundant note 1 and callout.

References: Updated references to reflect latest issue of inventory and projection data.

Reason/Justification for Change:

Changes in operations have resulted in the reduction in the number of combustible and plastic containers in RF001.01. The addition of IDC 3010, Composite Debris (Up to 10 percent organic), and IDC 3011, Composite Debris (Up to 100% organic), meant much of the D&D waste was not segregated but placed into a single container. This change to accommodate the closure site status of RFETS meant that many of the combustibles were packaged with the D&D waste and not segregated as they were during operations. These IDCs are profiled separately.

Other updates (e.g., sentence about single waste stream; paragraphs about screening for prohibited items, beryllium, and INEEL waste differences; addition of the transportation paragraph; clarification to radionuclide table) were made to comply with current procedural requirements for preparation of AK Summaries and to make the document compositionally consistent with current AK Summaries prepared for recently approved waste streams.

Update for WIPP Operating Record (WSPF RF001.01) certification:

I hereby certify that I have reviewed the information in this Update for WIPP Operating Record, and it is complete and accurate to the best of my knowledge. I understand that this information will be made available to regulatory agencies and that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.



Signature of Site Project Manager

G. A. O'Leary, Manager TRU Programs
Printed Name and Title

6-22-04

Date



Department of Energy

Carlsbad Area Office
P. O. Box 3090
Carlsbad, New Mexico 88221
July 3, 2000

FILE
DOE to NMED

Mr. John Kieling, Manager
Hazardous Waste Permits Program
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
P. O. Box 26110
Santa Fe, NM 87502-6110

Dear Mr. Kieling:

The Department of Energy, Carlsbad Area Office, has approved the Rocky Flats Environmental Technology Site Waste Stream Profile Form for Waste Stream RF001.01. Enclosed is a copy of the approved form as required by Section B-4(b)(1) of the WIPP's Hazardous Waste Permit No. NM4890139088-TSDF.

Please contact Mr. Kerry Watson at (505) 234-7357 should you have any questions regarding this approval.

Sincerely,

Dr. Inés R. Triay
Manager

Enclosure

cc w/enclosure:

E. Rose, CAO
B. Stroud, CAO
C. Zvonar, CAO
S. Zappe, NMED
C. Walker, TechLaw
G. Barnes, WID
J. Epstein, WID
K. Mikus, WID
L. Steven, WID
M. Whatley, WID

CAO:NTWP:RAS: 00-1121 UFC 5822



Printed on recycled paper

WIPP WASTE STREAM PROFILE FORM

RF001.01, Revision 1

Page 1 of 9

June 13, 2000

Waste Stream Profile Number: RF001.01

Generator site name: RFETS

Technical contact: Eric D'Amico

Generator site EPA ID: CO7890010526

Phone number: (303) 966-5362

Date site certified by CAO: March 9, 2000

Title, version number, and date of documents used for WAC certification: Rocky Flats Environmental Technology Site TRU Waste Characterization Program Quality Assurance Project Plan, Revision 4, 95-QAPjP-0050, December 1999. Transuranic (TRU) Waste Management Manual, Revision 3, 1-MAN-008-WM-001, December 1999. WIPP Waste Acceptance Criteria, Revision 7, DOE/WIPP-069, November 1999.

Did your facility generate this waste? Yes No If no, provide the name and EPA ID of the original generator:

Waste Stream Information⁽¹⁾

WIPP ID [WTWBIR ID (HQ ID)]: RF-TT0330 (RF-W101), RF-TT0336 (RF-W101), RF-TT0337 (RF-W101),

RF-TT0821 (RF-W101), RF-TT0822 (RF-W101), RF-TT0825 (RF-W101), RF-TT02216 (RF-W106)

Summary Category Group: S5000 Waste Matrix Code Group: Combustible Waste

Waste Stream Name: Combustible/TRU and Super Compacted Combustibles/TRU

Description from the WTWBIR: Cloth and paper products from cleanup of gloveboxes and spills.

Defense TRU Waste: Yes No Check one: CH RH

Number of SWBs 12 Number of Drums 10,152 Number of Canisters N/A

Data package numbers supporting this waste stream characterization: See Table 7.

List applicable EPA Hazardous Waste Codes⁽²⁾: None

Applicable TRUCON Content Codes: RF 116A, RF 116C, RF 116D, RF 116DF, RF 116E, RF 116EF, RF 116F, RF 116G, RF 116GF, RF 116I, RF 116J, RF 116K, RF 116KF, RF 116L, RF 116M, RF 116MF, RF 116N, RF 116P, RF 116PF, RF 116Q

Acceptable Knowledge Information⁽¹⁾

[For the following, enter supporting the documentation used (i.e., references and dates)]

Required Program Information

- Map of site: Reference List, No. 3
- Facility mission description: Reference List, No. 3
- Description of operations that generate waste: Reference List, Nos. 1, 2, 3, 6
- Waste identification/categorization schemes: Reference List, Nos. 11, 12
- Types and quantities of waste generated: Reference List, Nos. 1, 2, 3, 6
- Correlation of waste streams generated from the same building and process, as appropriate: Reference List, Nos. 1, 2, 6
- Waste certification procedures: Reference List, No. 5

Required Waste Stream Information

- Area(s) and building(s) from which the waste stream was generated: Reference List, Nos. 1, 2, 6
- Waste stream volume and time period of generation: Reference List, Nos. 4, 6
- Waste generating process description for each building: Reference List, Nos. 1, 2, 6
- Process flow diagrams: Reference List, Nos. 1, 2
- Material inputs or other information identifying chemical/radionuclide content and physical waste form: Reference List, Nos. 1, 2, 3, 6
- Which Defense Activity generated the waste: (Check one) Reference List, No. 3
 - Weapons activities including defense inertial confinement fusion
 - Verification and control technology
 - Defense nuclear waste and material by products management
 - Defense nuclear waste and materials security and safeguards and security investigations
 - Naval Reactors development
 - Defense research and development
 - Defense nuclear materials production

WIPP WASTE STREAM PROFILE FORM

RF001.01, Revision 1

Page 2 of 9

June 13, 2000

Supplemental Documentation

- Process design documents: N/A
- Standard operating procedures: N/A
- Safety Analysis Reports: N/A
- Waste packaging logs: N/A
- Test plans/research project reports: N/A
- Site data bases: N/A
- Information from site personnel: N/A
- Standard industry documents: N/A
- Previous analytical data: N/A
- Material safety data sheets: N/A
- Sampling and analysis data from comparable/surrogate Waste: N/A
- Laboratory notebooks: N/A

Sampling and Analysis Information⁽¹⁾

[For the following, when applicable, enter procedure title(s), number(s) and date(s)]

- Radiography: Reference List, Nos. 8, 9
- Visual Examination: Reference List, No. 7
- Headspace Gas Analysis
VOCs: Reference List, No. 10
Flammable: Reference List, No. 10
Other gases (specify): N/A
- Homogeneous Solids/Soils/Gravel Sample Analysis (Tables 1, 3, 4, and 5 are not applicable and not included)
Total metals: N/A
PCBs: N/A
VOCs: N/A
Nonhalogenated VOCs: N/A
Semi-VOCs: N/A
Other (specify): N/A

Waste Stream Profile Form certification:

I hereby certify that I have reviewed the information in this Waste Stream Profile Form, and it is complete and accurate to the best of my knowledge. I understand that this information will be made available to regulatory agencies and that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

[Signature]
Signature of Site Project Manager

G. A. O'LEARY, MGR.
Printed Name and Title

6/13/00
Date

- NOTE** (1) Use back of sheet or continuation sheets, if required.
(2) If radiography, visual examination, headspace gas analysis, and/or homogeneous solids/soils/gravel sample analysis were used to determine EPA Hazardous Waste Codes, attach signed summary reports documenting this determination.

REFERENCE LIST

1. Backlog Waste Reassessment Baseline Book, Waste Form 52, Combustibles, April 2000.
2. Waste Stream and Residue Identification and Characterization (WSRIC), Revision 6, and archived versions.
3. RFETS TRU Waste Acceptable Knowledge Supplemental Information, RF/RMRS-97-018, Revision 7, May 2000.
4. Waste and Environmental Management System (WEMS) database.
5. Transuranic Waste Certification, 1-PRO-X05-WC-4018, Revision 1, February 2000.
6. Acceptable Knowledge TRU/TRM Waste Stream Summaries, RMRS-WIPP-98-100, Revision 8, May 2000.
7. Visual Examination for the TRU Waste Characterization Program, 4-H80-776-ASRF-007, Revision 2, December 1999.
8. Real-Time Radiography Testing of Transuranic and Low-Level Waste, 4-W30-NDT-00664, Revision 2, November 1999.
9. Real-Time Radiography Testing of Transuranic and Low-Level Waste in Building 569, 4-119-NDT-00569, Revision 3, November 1999.
10. GC/MS Determination of Volatile Organics Waste Characterization, L-4111-T, March 2000.
11. Waste Characterization, Generation, and Packaging, 1-PRO-079-WGI-001, Revision 1, May 2000.
12. Waste Characterization Program Manual, 1-MAN-036-EWQA-Section 1.6.1, Revision 1, December 1999.

WIPP WASTE STREAM PROFILE FORM ATTACHMENTS

RF001.01, Revision 1

Page 4 of 9

June 13, 2000

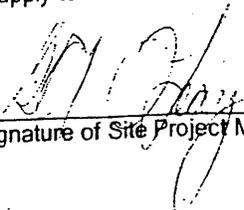
Form A
Reconciliation with Data Quality Objectives

I certify by signature (below) that sufficient data have been collected to determine the following Program-required waste parameters:

WSPF # RF001.01

Item	Check Box ^a	Reconciliation Parameter
1	✓	Waste Matrix Code as reported in WEMS.
2	✓	Waste Material Parameter Weights for individual containers as reported in WEMS.
3	✓	The waste matrix code identified is consistent with the type of sampling and analysis used to characterize the waste.
4	✓	Container mass and activities of each radionuclide of concern as reported in WEMS.
5	✓	Each waste container of waste contains TRU radioactive waste.
6	✓	Mean concentrations, UCL ₉₀ for the mean concentrations, standard deviations, and the number of samples collected for each VOC in the headspace gas of waste containers in the waste stream/waste stream lot.
7	N/A	Mean concentrations, UCL ₉₀ for the mean concentrations, standard deviations, and number of samples collected for VOCs in the waste stream/waste stream lot. Summary Categories S3000 and S4000.
8	N/A	Mean concentrations, UCL ₉₀ for the mean concentrations, standard deviations, number of samples collected for SVOCs in the waste stream/waste stream lot. Summary Categories S3000 and S4000.
9	N/A	Mean concentrations, UCL ₉₀ for the mean concentrations, standard deviations, and number of samples collected for metals in the waste stream/waste stream lot. Summary Categories S3000 and S4000.
10	N/A	Sufficient number of samples was taken to meet statistical sampling requirements.
11	✓	Only validated data were used in the above calculations, as documented through the site data review and validation forms and process.
12	✓	Waste containers were selected randomly for sampling, as documented in site procedures.
13	✓	The potential flammability of TRU waste headspace gases.
14	✓	Sufficient number of waste containers was visually examined to determine with a reasonable level of certainty that the UCL ₉₀ for the miscertification rate is less than 14 percent.
15	✓	Whether the waste stream exhibits a toxicity characteristic (TC) under 40 CFR Part 261, Subpart C.
16	✓	All TICs were appropriately identified and reported in accordance with the requirements of the WAP prior to submittal of a waste stream profile form for a waste stream or waste stream lot.
17	✓	The overall completeness, comparability, and representativeness QAOs were met for each of the analytical and testing procedures as specified in the WAP Sections B3-2 through B3-9 prior to submittal of a waste stream profile form for a waste stream or waste stream lot.
18	✓	The RTLs (i.e., PRQLs) for all analyses were met prior to submittal of a waste stream profile form for a waste stream or waste stream lot.
19	✓	Whether the waste stream can be classified as hazardous or non-hazardous at the 90-percent confidence limit.

^a Check (✓) indicates that data or acceptable knowledge are sufficient to determine the waste parameters and that the waste parameters have been reported in the listed document or database. N/A indicates parameter does not apply to waste stream. NO indicates data are insufficient.


Signature of Site Project Manager

GA OLESON
Printed Name

6/13/00
Date

WSPF WASTE STREAM PROFILE FORM
ATTACHMENTS

RF001.01, Revision 1

Page 5 of 9

June 13, 2000

Data Summary Report—Table 2: Headspace Gas Summary Data

WSPF # RF001.01
2A

ANALYTE	# Samples ^b	Maximum (ppmv)	Mean (ppmv)	SD (ppmv)	UCL ₉₀ (ppmv)	RTL ^c (ppmv)	EPA Code ^a
1,1-Dichloroethane						NA	
1,2-Dichloroethane						10	
1,1-Dichloroethylene						10	
cis-1,2-Dichloroethylene						NA	
1,1,2,2-Tetrachloroethane						10	
1,1,1-Trichloroethane	1	0.4	0.16	0.05	0.17	10	
1,1,2-Trichloro-1,2,2-Trifluoroethane	1	5	0.25	0.67	0.37	10	
Acetone	10	17.5	1.88	2.89	2.4	100	
Benzene	8	3.2	0.29	0.46	0.38	10	
Bromoform						NA	
Butanol	1	6	2.75	0.81	2.89	100	
Carbon disulfide	21	6.8	0.92	1.32	1.16	10	
Carbon tetrachloride	2	1.7	0.21	0.28	0.26	10	
Chlorobenzene						10	
Chloroform	5	1.7	0.23	0.28	0.28	10	
Ethyl benzene						10	
Ethyl ether						100	
Methanol						100	
Methyl ethyl ketone	3	17.6	1.35	2.32	1.76	100	
Methyl isobutyl ketone						100	
Methylene chloride						10	
o-Xylene						10	
m/p-Xylene						10	
Tetrachloroethylene						10	
Toluene	48	43.5	6.2	7.5	7.52	72.02 ^d	
Trichloroethylene						10	

Data Summary Report—Table 2: Headspace Gas Summary Data (continued)

WSPF # RF001.01

2B

TENTATIVELY IDENTIFIED COMPOUND	Maximum Observed Estimated Concentrations (ppmv) ^b	# Samples Containing TIC ^b
No TICs included in the 40 CFR 261 Appendix VIII list were detected in at least 25 percent of the headspace gas samples for the waste stream lot.		

Did the data verify the acceptable knowledge? Yes No

If not, describe the basis for assigning the EPA Hazardous Waste Codes:

NOTES:

- ^a No entry indicates no associated EPA Code assigned to the waste stream.
- ^b No entry indicates no detectable measurements available for statistics.
- ^c RTLs for headspace gas analysis results correspond to the analyte PRQL for analytes that are hazardous waste constituents. "NA" means the analyte is not a hazardous waste constituent and so has no associated regulatory threshold.
- ^d Limit used for evaluating EPA Hazardous Waste Code for toluene (Reference No. 3).

**Data Summary Report—Table 6: Exclusion of
Prohibited Items**

WSPF # RF001.01

The absence of prohibited items is documented through acceptable knowledge. The absence of free liquids, indicating no corrosive, ignitable or reactive waste, and the absence of pressurized containers has been verified by radiography or visual examination of each container in this waste stream or waste stream lot.

**WIPP WASTE STREAM PROFILE FORM
ATTACHMENTS**

RF001.01, Revision 1

Page 8 of 9

June 13, 2000

**Data Summary Report—Table 7: Correlation
of Container Identification to Data Packages**

WSPF # RF001.01

Drum No.	Headspace Sample Batch No.	Headspace VOC Data Package	VE Data Package ²	Radioassay Data Package	RTR Data Package
D66629	00W0003	HVOC-DP-00275		CIQ-97-012	6T1633
D67537	00W0002	HVOC-DP-00274		CIQ-97-012	6T1629
D67544	00W0003	HVOC-DP-00274		CIQ-97-003	6T1630
D67697	00W0001	HVOC-DP-00272		CIQ-97-001	6T1630
D67953	00W0003	HVOC-DP-00275		CIQ-97-001	6T1631
D68601	00W0001	HVOC-DP-00273		CIQ-98-004	6T1629
D68790	00W0002	HVOC-DP-00274		CIQ-97-011	6T1633
D68826	00W0003	HVOC-DP-00275		CIQ-97-011	6T1631
D68838	00W0002	HVOC-DP-00274		CIQ-97-010	6T1631
D68855	00W0002	HVOC-DP-00274		CIQ-97-012	6T1633
D68871	00W0002	HVOC-DP-00274		CIQ-97-011	6T1630
D68953	00W0001	HVOC-DP-00272		CIQ-97-002	6T1630
D69008	00W0001	HVOC-DP-00272		CIQ-97-002	6T1630
D69240	00W0001	HVOC-DP-00272		CPN-97-007	6T1630
D69353	00W0001	HVOC-DP-00272		CIQ-97-003	6T1630
D69370	00W0003	HVOC-DP-00275		CIQ-97-004	6T1631
D70263	00W0003	HVOC-DP-00275		CIQ-97-004	6T1631
D70319	00W0003	HVOC-DP-00274		CIQ-97-010	6T1631
D70332	00W0003	HVOC-DP-00274		CIQ-97-018	6T1633
D70353	00W0001	HVOC-DP-00273		CIQ-97-023	6T1630
D70378	00W0002	HVOC-DP-00274		CIQ-97-010	6T1630
D70392	00W0003	HVOC-DP-00274		CIQ-97-010	6T1631
D70501	00C1102	HVOC-DP-00271		CIQ-97-023	6T1630
D70510	00W0001	HVOC-DP-00272		CIQ-97-005	6T1630
D70659	00W0001	HVOC-DP-00272		CPN-97-008	6T1629
D70930	00W0001	HVOC-DP-00272		CIQ-97-002	6T1630
D71072	00W0003	HVOC-DP-00274		CIQ-97-011	6T1631
D71191	00W0003	HVOC-DP-00274		CIQ-97-010	6T1631
D71511	00W0003	HVOC-DP-00275		CIQ-97-004	6T1631
D71687	00W0002	HVOC-DP-00273		CPN-97-001	6T1631
D72143	00W0002	HVOC-DP-00273	VE-2000-008	CIQ-97-007	6T1636
D72145	00W0001	HVOC-DP-00272		CIQ-97-021	6T1630
D72930	00W0003	HVOC-DP-00275		CIQ-97-001	6T1631
D73038	00W0003	HVOC-DP-00274		CIQ-97-003	6T1631
D73201	00W0001	HVOC-DP-00272		CIQ-97-003	6T1630
D73825	00W0003	HVOC-DP-00274		CIQ-97-003	6T1631

**WIPP WASTE STREAM PROFILE FORM
ATTACHMENTS**

RF001.01, Revision 1

Page 9 of 9

June 13, 2000

Drum No.	Headspace Sample Batch No.	Headspace VOC Data Package	VE Data Package ^a	Radioassay Data Package	RTR Data Package
D74659	00C1101	HVOC-DP-00270	VE-2000-008	CIQ-97-021	6T1633
D75029	00W0002	HVOC-DP-00273		CIQ-99-008	6T1629
D75196	00W0001	HVOC-DP-00273		CPN-97-002	6T1630
D75626	00W0001	HVOC-DP-00272		CIQ-97-022	6T1629
D75894	00W0003	HVOC-DP-00275		CIQ-97-021	6T1631
D86130	00W0001	HVOC-DP-00273		CIQ-98-018	6T1629
D86450	00W0002	HVOC-DP-00273	VE-2000-008	CIQ-97-011	6T1636
D86465	00W0001	HVOC-DP-00272		CIQ-98-016	6T1629
D86866	00W0002	HVOC-DP-00274		CIQ-98-014	6T1629
D87947	00W0001	HVOC-DP-00272		CIQ-98-014	6T1629
D89358	00W0002	HVOC-DP-00273	VE-2000-008	CIQ-00-014	6T1635
D93081	00W0002	HVOC-DP-00273	VE-2000-008	CIQ-00-014	6T1635
D98829	00W0002	HVOC-DP-00273	VE-2000-008	CIQ-99-027	6T1635
D98832	00W0002	HVOC-DP-00273	VE-2000-008	CPN-99-015	6T1635
D99238	00C1102	HVOC-DP-00271		CIQ-99-031	6T1633
D99321	00W0002	HVOC-DP-00273	VE-2000-008	CIQ-00-014	6T1636

NOTES:

^a No entry indicates container was not selected for visual examination.

6. TRU WASTE STREAM SUMMARY INFORMATION

6.1 TRU Combustible and Plastic Wastes

Profile No. RF001.01

Acceptable Knowledge Waste Stream Summary

Waste Stream: Combustible and Plastic Wastes. RF 330a. RF 336a. RF 337a. RF 821a.
RF 822a. RF 825a. RF 2216

Generation Buildings: Buildings 371. 374. 559. 707. 771. 774. 776. 777. 779. 881. 886. and
991^(6,7)

Waste Stream Volume (Current): 2.785 55-gallon drums and 9 Standard Waste Boxes^(6,7)

Generation Dates (Current): May 1980 – October 1999^(6,7)

Waste Stream Volume (Projected): 1.552 m³ (55-gallon drums and Standard Waste Boxes)^(7,8,9)

Generation Dates (Projected): November 1999 – September 2005^(8,9)

TRUCON Content Codes⁽¹⁾: RF 116A, RF 116C, RF 116D, RF 116DF, RF 116E, RF 116EF, RF
116F, RF 116G, RF 116GF, RF 116I, RF 116J, RF 116K, RF 116KF, RF 116L, RF 116M, RF
116MF, RF 116N, RF 116P, RF 116PF, RF 116Q

Transuranic Waste Baseline Inventory Report Information⁽²⁾

WIPP Identification Numbers: RF-TT0330, RF-TT0336, RF-TT0337, RF-TT0821, RF-TT0822,
RF-TT0825, RF-TT2216

Summary Category Group: S5000 Waste Matrix Code Group: Combustible Waste

Waste Matrix Code: S5440 and S5330

Waste Stream Name: Combustibles/TRU and Super Compacted Combustibles/TRU

Description from the TWBIR: Cloth and paper products from cleanup of gloveboxes and spills.

05/11/00

6.1.1 Waste Stream Description

TRU combustible and plastic wastes consist of dry combustibles, wet combustibles, super compacted combustibles, and plastic. Table 6-1 presents the waste matrix codes and waste material parameters for combustible and plastic wastes.⁽³⁾

Table 6-1, Combustible and Plastic Waste Description

IDC	IDC Description	Waste Matrix Code	Waste Material Parameters	Weight % (Average)
330 821	Dry Combustibles	S5390, Unknown/Other Organic Debris	Cellulosics ¹ Plastics ² Iron-based Metal/Alloys Other Inorganic Materials	85% 10% 4% 1%
336 822	Wet Combustibles	S5390, Unknown/Other Organic Debris	Cellulosics ¹ Plastics ² Iron-based Metal/Alloys Rubber Aluminum-based Metal/Alloys	85% 11% 2% 1% 1%
337 825	Plastic	S5390, Unknown/Other Organic Debris	Plastics ² Cellulosics ¹ Iron-based Metal/Alloys Other Inorganic Materials	95% 3% 1% 1%
2216	Super Compacted Combustible Waste	S5390, Unknown/Other Organic Debris	Cellulosics Plastics	50% 50%

Notes:

1. The average weight percent of cellulosic materials is based on RTR and includes the fiberboard liner.
2. The average weight percent of plastic materials is based on RTR and includes plastic liner bags.

IDC 330, Dry Combustibles: Dry combustibles such as cloth, paper, and wood. This IDC may change to IDC 821, 831, 851, or 861 at the point of assay. RTR inspection of containers assigned this IDC has identified significant amounts of plastic materials. Containers with more than 50% plastic, by weight, are reassigned the appropriate plastic IDC.^(4,5)

IDC 336, Wet Combustibles: Wet combustibles such as paper, cloth, and wood that contain a discernible amount of moisture. The wastes are drained or wrung out before packaging to prevent accumulation of free liquid. This IDC may change to IDC 822, 832, 852, or 862 at the point of assay. RTR inspection of containers assigned this IDC has identified significant amounts of plastic materials. Containers with more than 50% plastic, by weight, are reassigned the appropriate plastic IDC.^(4,5)

IDC 337, Plastic: Plastics may include polyvinyl chloride (PVC) sheeting, poly bottles, supplied air suits, polyethylene, and other plastics. This IDC may change to IDC 825, 833, 853, or 863 at the point of assay. This IDC includes containers originally assigned combustibles IDCs that were reassigned because RTR inspection of the containers identified more than 50% plastic, by weight.^(4,5)

IDC 2216, Super Compacted Combustible Waste: Super compacted combustible waste consists of any combination of IDC 821, 822, or 825.^(4,5)

6.1.2 Areas of Operation

TRU combustible and plastic wastes were primarily generated by the following operations:

- Plutonium Production
- Plutonium Recovery and Purification
- Laboratory Operations
- Waste Treatment
- Research and Development
- Maintenance
- Residue Repackaging and Treatment
- Decontamination and Decommissioning Operations

6.1.3 Generation Processes

Combustible and plastic wastes were generated by nearly every operation on site. Table 6-2 provides the title of each generating process along with the corresponding WSRIC building and process number. A description of each of these processes, process flow diagrams, and details of each combustible and plastic waste stream can be found in the *WSRIC Building Books* or *archived WSRIC files*.

Table 6-2, Combustible and Plastic Waste Generating Processes

Building	Process	Title
<i>Building 371</i>		
371	1	DCHP Preparation
371	2	Caustic Treatment
371	3	Repack Operations
371	4	Analytical Lab
371	5	Chemical Standards Laboratory
371	6	PROVE Vacuum System
371	7	Process Vent Scrubber
371	8	Utility Scrubber System
371	15	General Waste (RMMA)
371	16	Caustic Treatment (New)
371	18	Heating, Ventilation, & Air Conditioning
371	19	Caustic Waste Treatment System
371	20	Organic Contaminated Residue Treatment
371	21	Nitrate Contaminated Residue Treatment
371	22	Beryllium Parts Cleaning
371	23	Salt Residues Repack Project
<i>Building 374</i>		
374	1	Acid Neutralization
374	2	Radioactive Decontamination
374	3	Sludge Solidification
374	6	General Building Operations

05/11/00

Building	Process	Title
<i>Building 528</i>		
528	1	Process Waste Tanks
<i>Building 559</i>		
559	1	ICP Mass Spectrometry Metal Analysis
559	2	Dynamic Analysis
559	3	X-Ray Methods
559	4	Infrared Analysis
559	5	GC/MS Environmental Samples/RCRA Waste
559	6	Thermal Analysis
559	7	Emissions Spectroscopy
559	8	Miscellaneous Analyses
559	9	Isotopic Analysis
559	11	Nondestructive Analysis
559	12	Uranium Analysis
559	13	Gallium Analysis
559	14	Plutonium Assay
559	15	Carbon Analysis
559	16	Raschig Ring Analysis
559	17	Coulometric Titration
559	18	Iron & Silicon Nonroutine
559	19	Nonroutine Ion Chromatograph
559	20	Nonroutine Plutonium Oxide
559	21	Assay Of Uranium By Auto Titration
559	22	Specific Ion Electrode
559	23	Sample Receiving
559	24	Sample Break In And Sample Cutting
559	25	Maintenance
559	28	ICP Spectroscopy
559	29	Atomic Absorption
559	30	General Waste
559	31	Extractions
559	33	GC Analysis--Production Support
559	34	GC Analysis--Production Support
559	35	Total Metals Digestion
559	36	Toxicity Characterization Leaching Procedure
559	37	Analysis Of Sulfides/Aqueous Solutions
559	38	Total And Amenable Cyanide Analysis
559	39	Analysis For Reactive Sulfides
559	40	Analysis For Reactive Cyanide
559	41	Sulfide Analysis
559	42	Cyanide Analysis
559	43	Mercury Analysis
559	44	Reactivity Characteristic Test of Pyrochemical Salts
559	45	Chromium (VI) Determination
559	48	Ion Chromatography
559	49	Radiochemical Operations
559	50	Particle Size Distribution
<i>Building 561</i>		
561	1	Filter Plenum Building
<i>Building 707</i>		
707	1	Module A

05/11/00

Building	Process	Title
707	2	Module K/X-Y Retriever
707	3	Module J
707	4	Rolling/Forming, Module B
707	5	Harwood Press
707	6	Machining--Module A
707	7	Machining--Module C
707	8	Nondestructive Testing--Module G
707	9	Machining--Module G
707	10	Electron Bombardment Brazing
707	11	Density Balance--Module B
707	12	Density Balance--Module C
707	14	Assembly--Module E
707	15	Assembly--Module F, Evacuation
707	16	Assembly--Superdry
707	18	Weighing--Module D
707	19	Radiography
707	20	Inspection
707	21	Testing--Module H
707	23	Briquetting
707	26	Calibration Lab--Module D
707	28	Nuclear Material Handling And Packaging
707	29	Utilities
707	30	Maintenance
707	32	Duct Remediation
707	33	General Waste
707	35	Module B Through H
707	36	Deactivation/Decon/Decommissioning (D3)
707	37	Idle Equipment
707	38	HEPA Filter Media Testing
707	39	Salt Stabilization
707	40	Residue Vitrification Study
707	41	Dry Residue Repack
707	42	Ash Residue Stabilization/Repack
<i>Building 729</i>		
729	2	Filter Plenums
<i>Building 771</i>		
771	1	High-Level Dissolution
771	2	Low-Level Dissolution
771	3	Cation Exchange
771	4	Anion Exchange
771	5	Feed Evaporation
771	6	Precipitation Feed Batching
771	7	Precipitation
771	8	Precipitation Filtrate Evaporation
771	9	Calcination
771	10	Hydrofluorination
771	11	Reduction And Button Breakout
771	12	Miscellaneous Residue Processing
771	13	Metal Burning
771	14	Crushing And Grinding
771	15	Spray Leach

Building	Process	Title
771	16	Oralloy Leach
771	17	Oralloy (OY) Precipitation
771	18	Special Recovery Anion Exchange
771	19	Caustic Filtration
771	20	Fume Scrubber
771	21	Vacuum Systems
771	23	Radioactive Inorganic Laboratory
771	24	Chemical Standards Laboratory
771	25	Chemical Technology
771	26	Plutonium Metallurgy
771	27	Plenums
771	29	Maintenance
771	31	Raschig Ring Removal
771	32	Radiological Safety
771	35	General Building Waste (RMMA)
771	36	H-4 Support Vacuum Systems
771	39	Solution Processing and Pipe Removal
<i>Building 774</i>		
774	2	Basic Liquid Waste: First Stage
774	3	Basic Liquid Waste: Second Stage
774	7	Maintenance/Filter Systems
774	8	General Waste
774	9	Miscellaneous Waste Handling
<i>Building 776/777</i>		
776	1	Pyrochemical Processing
776	2	Size Reduction
776	3	Advanced Size Reduction Facility
776	5	Coating
776	6	Utilities
776	9	Maintenance--Pipe Shop
776	10	Maintenance--Sheet Metal Shop
776	11	Machine Shop
776	13	Supercompactor
776	14	General Building Waste
777	4	Briquetting
777	6	Super Dry
777	7	Machining
777	8	Density Balance
777	9	Weighing
777	10	Radiography
777	11	Inspection
777	12	Carbon Tetrachloride System
777	14	Trichloroethane Collection & Filtration
777	15	Calibration Laboratory
777	16	Coatings Laboratory
777	17	Tritium Surveillance Laboratory
777	18	Plutonium Metallurgical Lab
777	20	Joining Pigma Welder
777	21	Joining CO2 Laser
777	23	General Building Waste
777	24	Container Repack

05/11/00

Building	Process	Title
776_777	1	Advanced Size Reduction Facility
776_777	2	Utilities
776_777	5	Supercompactor
776_777	6	General Building Waste
776_777	7	Nuclear Material Handling and Packaging
776_777	9	TCA Collection and Filtration
<i>Building 778</i>		
778	1	Laundry
<i>Building 779</i>		
779	1	Nuclear Joining
779	2	Generic Residue Treatment Process Wastes
779	8	RTT--Salt Recycle
779	9	Hydride-Hydride And Metal
779	10	Hydride-Hydride/Oxide
779	11	Hydride--Acid Leach
779	12	Hydride--Acid Boil Down (Calcining)
779	14	Physical Metallurgy
779	16	RTT--Plutonium Oxide Dissolution
779	17	RTT--Peroxide Precipitation
779	18	RTT--Residue Recovery Extraction
779	21	RTT--Ion Exchange Resin Project
779	23	Pu Tech-Gas-Solid Kinetic Studies
779	24	Pu Tech--Nuclear Material Compatibility Studies
779	25	Nondestructive Lab Testing & Metal Study
779	26	Surface Analysis Laboratory
779	27	Pu Tech-Microbalance Pu Reaction Studies
779	28	Utilities
779	37	D&D Programs
779	40	Deactivation
<i>Building 886</i>		
886	1	Critical Mass Laboratory
886	2	Maintenance
<i>Building 991</i>		
991	6	Maintenance
<i>D&D</i>		
D&D	3	Low-Level and TRU, Nonhazardous Waste Streams

In addition to the above processes, TRU combustibles and plastic wastes were generated in Building 881 during an exhaust system modification.⁽⁵⁾

05/11/00

6.1.4 RCRA Characterization

Table 6-3 presents the chemical constituent codes (CCCs) and Environmental Protection Agency (EPA) Hazardous Waste Numbers (HWNs) associated with the BWR Subpopulations and WSRIC Waste Streams assigned to TRU combustible and plastic waste containers. Supporting characterization information is provided in the *BWR Baseline Book*, *WSRIC Building Book*, and *WSRIC archived files*.

Table 6-3, Combustible and Plastic Waste RCRA Characterization

IDC	BWR Subpopulation	WSRIC Waste Stream	RCRA CCCs	Non-RCRA CCCs	EPA Hazardous Waste Numbers
<i>Dry Combustibles</i>					
0330		371 - 4 - 3	00	00	None
0330		371 - 6 - 11	00	00	None
0330		371 - 15 - 6	00	00	None
0330		371 - 15 - 9	00	00	None
0330		371 - 15 - 29	00	00	None
0330		371 - 15 - 106	00	70	None
0330		371 - 15 - 131	00	70	None
0330		371 - 15 - 150	00	00	None
0330		371 - 19 - 1	00	00	None
0330		371 - 19 - 2	00	00	None
0330		371 - 20 - 13	00	70	None
0330		371 - 21 - 5	00	00	None
0330		371 - 21 - 12	00	70	None
0330		371 - 21 - 26	00	00	None
0330		371 - 22 - 7	00	07	None
0330		371 - 23 - 11	00	00	None
0330		528 - 1 - 5	00	00	None
0330		559 - 4 - 42	00	00	None
0330		559 - 4 - 60	00	00	None
0330		559 - 5 - 23	00	00	None
0330		559 - 5 - 45	00	00	None
0330		559 - 6 - 6	00	00	None
0330		559 - 6 - 20	00	00	None
0330		559 - 8 - 57	00	00	None
0330		559 - 9 - 16	00	00	None
0330		559 - 9 - 28	00	00	None
0330		559 - 12 - 5	00	00	None
0330		559 - 15 - 5	00	00	None
0330		559 - 16 - 4	00	00	None
0330		559 - 16 - 20	00	00	None
0330		559 - 21 - 5	00	00	None
0330		559 - 23 - 12	00	00	None
0330		559 - 24 - 6	00	00	None
0330		559 - 25 - 5	00	00	None
0330		559 - 28 - 10	00	00	None
0330		559 - 29 - 3	00	00	None
0330		559 - 29 - 23	00	00	None
0330		559 - 30 - 39	00	00	None

ACCEPTABLE KNOWLEDGE
 TRU/TRM WASTE
 STREAM SUMMARIES

RMRS-WIPP-98-100
 REVISION 8
 PAGE 20

05/11/00

IDC	BWR Subpopulation	WSRIC Waste Stream	RCRA CCCs	Non-RCRA CCCs	EPA Hazardous Waste Numbers
0330		559 - 30 - 60	00	00	None
0330		559 - 31 - 17	00	00	None
0330		559 - 31 - 37	00	00	None
0330		559 - 33 - 18	00	00	None
0330		559 - 41 - 32	00	00	None
0330		559 - 42 - 7	00	02	None
0330		559 - 42 - 39	00	00	None
0330		559 - 43 - 7	00	00	None
0330		559 - 44 - 8	00	00	None
0330		559 - 48 - 1	00	00	None
0330		559 - 49 - 1	00	00	None
0330		559 - 50 - 3	00	00	None
0330		561 - 1 - 13	00	00	None
0330		707 - 1 - 30	00	00	None
0330		707 - 1 - 73	00	00	None
0330		707 - 2 - 25	00	00	None
0330		707 - 3 - 11	00	00	None
0330		707 - 4 - 14	00	00	None
0330		707 - 7 - 16	00	32	None
0330		707 - 30 - 11	00	00	None
0330		707 - 30 - 44	00	70	None
0330		707 - 32 - 3	00	00	None
0330		707 - 32 - 9	00	00	None
0330		707 - 35 - 3	00	00	None
0330		707 - 36 - 4	00	00	None
0330		707 - 36 - 35	00	70	None
0330		707 - 36 - 39	00	00	None
0330		707 - 39 - 6	00	00	None
0330		707 - 41 - 18	00	00	None
0330		707 - 42 - 2	00	00	None
0330		729 - 2 - 11	00	00	None
0330		771 - 23 - 1	00	00	None
0330		771 - 27 - 1	00	00	None
0330		771 - 29 - 1	00	00	None
0330		771 - 31 - 5	00	00	None
0330		771 - 32 - 1	00	00	None
0330		771 - 35 - 9	00	00	None
0330		771 - 35 - 10	00	00	None
0330		771 - 35 - 14	00	00	None
0330		771 - 35 - 39	00	00	None
0330		771 - 35 - 73	00	70	None
0330		771 - 35 - 74	00	70	None
0330		771 - 39 - 3	00	00	None
0330		774 - 8 - 1	00	00	None
0330		774 - 9 - 6	00	00	None
0330		776 - 1 - 14	00	00	None
0330		776 - 13 - 24	00	00	None
0330		776 - 14 - 1	00	00	None
0330		776 - 14 - 37	00	00	None
0330		777 - 23 - 1	00	00	None
0330		777 - 23 - 26	00	00	None

ACCEPTABLE KNOWLEDGE
 TRU/TRM WASTE
 STREAM SUMMARIES

RMRS-WIPP-98-100
 REVISION 8
 PAGE 21

05/11/00

IDC	BWR Subpopulation	WSRIC Waste Stream	RCRA CCCs	Non-RCRA CCCs	EPA Hazardous Waste Numbers
0330		777 - 24 - 4	00	00	None
0330		776_777 - 1 - 10	00	00	None
0330		776_777 - 6 - 1	00	00	None
0330		776_777 - 6 - 25	00	00	None
0330		776_777 - 6 - 111	00	00	None
0330		776_777 - 6 - 126	00	07	None
0330		779 - 2 - 6	00	00	None
0330		779 - 23 - 8	00	00	None
0330		779 - 28 - 15	00	00	None
0330		779 - 37 - 2	00	00	None
0330		779 - 40 - 4	00	00	None
0330		779 - 40 - 103	00	07	None
0330		991 - 6 - 16	00	00	None
0330		D&D - 3 - 1	00	00	None
0330		D&D - 3 - 2	00	00	None
0330	52BA		00	00	None
0330	52EB		00	00	None
0330	52II		00	00	None
0330	52LA		00	00	None
0330	52NF		00	00	None
0330	52PA		00	00	None
0330	52RD		00	00	None
0330	52TF		00	00	None
0330	52YA		00	00	None
0330	98GA		00	00	None
0330	98GD		00	00	None
0821	52AC		00	02	None
0821	52AI		00	00	None
0821	52AW		00	00	None
0821	52BT		00	00	None
0821	52IG		00	00	None
0821	52LJ		00	00	None
0821	52PQ		00	00	None
0821	52TH		00	00	None
0821	98GG		00	00	None
0821	98GH		00	32	None
0821	98GJ		00	00	None
<i>Wet Combustibles</i>					
0336		371 - 3 - 7	00	156988	None
0336		371 - 4 - 23	00	026988	None
0336		371 - 5 - 3	00	0264	None
0336		371 - 6 - 2	00	00	None
0336		371 - 15 - 6	00	00	None
0336		371 - 15 - 30	00	00	None
0336		371 - 15 - 55	00	32	None
0336		371 - 15 - 151	00	88	None
0336		371 - 19 - 6	00	4588	None
0336		371 - 19 - 7	00	4588	None
0336		371 - 20 - 15	00	70	None
0336		371 - 21 - 1	00	00	None

ACCEPTABLE KNOWLEDGE
 TRU/TRM WASTE
 STREAM SUMMARIES

RMRS-WIPP-98-100
 REVISION 8
 PAGE 22

05/11/00

IDC	BWR Subpopulation	WSRIC Waste Stream	RCRA CCC's	Non-RCRA CCC's	EPA Hazardous Waste Numbers
0336		371 - 21 - 6	00	88	None
0336		371 - 21 - 14	00	70	None
0336		371 - 21 - 15	00	70	None
0336		371 - 21 - 27	00	88	None
0336		371 - 22 - 5	00	07	None
0336		371 - 23 - 15	00	00	None
0336		374 - 6 - 24	00	6988	None
0336		528 - 1 - 2	00	00	None
0336		559 - 3 - 4	00	0232	None
0336		559 - 4 - 2	00	00	None
0336		559 - 5 - 22	00	6988	None
0336		559 - 5 - 44	00	32	None
0336		559 - 6 - 24	00	32	None
0336		559 - 7 - 1	00	02	None
0336		559 - 9 - 7	00	020118	None
0336		559 - 9 - 29	00	32	None
0336		559 - 16 - 23	00	020588	None
0336		559 - 21 - 3	00	02	None
0336		559 - 23 - 6	00	00	None
0336		559 - 24 - 5	00	698832	None
0336		559 - 25 - 14	00	32	None
0336		559 - 25 - 18	00	698832	None
0336		559 - 28 - 5	00	0269	None
0336		559 - 28 - 20	00	32	None
0336		559 - 29 - 3	00	02	None
0336		559 - 29 - 35	00	02	None
0336		559 - 30 - 3	00	6988	None
0336		559 - 30 - 10	00	69	None
0336		559 - 30 - 56	00	3269	None
0336		559 - 31 - 42	00	3269	None
0336		559 - 33 - 17	00	6988	None
0336		559 - 35 - 8	00	8788	None
0336		559 - 41 - 33	00	326988	None
0336		559 - 42 - 29	00	02	None
0336		559 - 42 - 40	00	326988	None
0336		559 - 43 - 8	00	326988	None
0336		559 - 44 - 4	00	3269	None
0336		559 - 45 - 6	00	010288	None
0336		559 - 48 - 5	00	32	None
0336		559 - 49 - 10	00	023269	None
0336		559 - 50 - 1	00	32	None
0336		561 - 1 - 16	00	6988	None
0336		707 - 1 - 23	00	88	None
0336		707 - 1 - 29	00	32	None
0336		707 - 1 - 75	00	32	None
0336		707 - 2 - 18	00	88	None
0336		707 - 2 - 24	00	32	None
0336		707 - 3 - 12	00	88	None
0336		707 - 4 - 13	00	32	None
0336		707 - 7 - 15	00	32	None
0336		707 - 12 - 4	00	00	None

ACCEPTABLE KNOWLEDGE
 TRU/TRM WASTE
 STREAM SUMMARIES

RMRS-WIPP-98-100
 REVISION 8
 PAGE 23

05/11/00

IDC	BWR Subpopulation	WSRIC Waste Stream	RCRA CCCs	Non-RCRA CCCs	EPA Hazardous Waste Numbers
0336		707 - 14 - 13	00	32	None
0336		707 - 30 - 33	00	32	None
0336		707 - 30 - 36	00	69	None
0336		707 - 30 - 46	00	70	None
0336		707 - 32 - 13	00	00	None
0336		707 - 32 - 14	00	56	None
0336		707 - 33 - 9	00	00	None
0336		707 - 35 - 9	00	69	None
0336		707 - 35 - 11	00	32	None
0336		707 - 36 - 11	00	32	None
0336		707 - 36 - 37	00	70	None
0336		707 - 38 - 2	00	00	None
0336		707 - 39 - 5	00	00	None
0336		707 - 41 - 22	00	88	None
0336		729 - 2 - 10	00	8788	None
0336		771 - 1 - 16	00	02	None
0336		771 - 3 - 3	00	02	None
0336		771 - 4 - 3	00	6988	None
0336		771 - 5 - 3	00	02	None
0336		771 - 8 - 3	00	02	None
0336		771 - 9 - 3	00	02	None
0336		771 - 10 - 3	00	0205	None
0336		771 - 11 - 3	00	00	None
0336		771 - 12 - 4	00	00	None
0336		771 - 16 - 3	00	02	None
0336		771 - 17 - 3	00	02	None
0336		771 - 18 - 3	00	6988	None
0336		771 - 21 - 3	00	02	None
0336		771 - 23 - 2	00	0205	None
0336		771 - 24 - 2	00	05	None
0336		771 - 25 - 1	00	00	None
0336		771 - 25 - 3	00	02	None
0336		771 - 27 - 2	00	02	None
0336		771 - 29 - 21	00	?? ¹	None
0336		771 - 31 - 3	00	0205	None
0336		771 - 35 - 1	00	00	None
0336		771 - 35 - 11	00	6988	None
0336		771 - 35 - 37	00	00	None
0336		771 - 35 - 67	00	70	None
0336		771 - 35 - 68	00	70	None
0336		771 - 36 - 6	00	0205	None
0336		771 - 39 - 5	00	02	None
0336		776 - 3 - 29	00	88	None
0336		776 - 14 - 15	00	88	None
0336		776 - 14 - 36	00	88	None
0336		777 - 23 - 9	00	666988	None
0336		776_777 - 1 - 11	00	88	None
0336		776_777 - 2 - 14	00	32	None
0336		776_777 - 2 - 18	00	69	None
0336		776_777 - 6 - 13	00	?? ¹	None
0336		776_777 - 6 - 24	00	326988	None

ACCEPTABLE KNOWLEDGE
 TRU/TRM WASTE
 STREAM SUMMARIES

RMRS-WIPP-98-100
 REVISION 8
 PAGE 24

05/11/00

IDC	BWR Subpopulation	WSRIC Waste Stream	RCRA CCCs	Non-RCRA CCCs	EPA Hazardous Waste Numbers
0336		776_777 - 6 - 127	00	076988	None
0336		776_777 - 7 - 2	00	45	None
0336		779 - 28 - 17	00	8788	None
0336		779 - 40 - 10	00	32	None
0336		779 - 40 - 105	00	7088	None
0336		779 - 40 - 106	00	0788	None
0336		886 - 2 - 13	00	6988	None
0336		D&D - 3 - 4	00	698788	None
0336		D&D - 3 - 54	00	32	None
0336		D&D - 3 - 105	00	70	None
0336		D&D - 3 - 106	00	70	None
0336	52BD		00	0205	None
0336	52BE		00	00	None
0336	52BF		00	15	None
0336	52BG		00	02	None
0336	52BK		00	02	None
0336	52IL		00	02	None
0336	52IM		00	0205	None
0336	52IX		00	00	None
0336	52LE		00	00	None
0336	52PE		00	00	None
0336	52VD		00	00	None
0336	52YB		00	00	None
0336	98IA		00	00	None
0336	98IE		00	00	None
0822	52AE		00	020550	None
0822	52BL		00	02	None
0822	52BP		00	00	None
0822	52BR		00	15	None
0822	52CO		00	00	None
0822	52KD		00	0205	None
0822	52KJ		00	0205	None
0822	52LK		00	00	None
0822	52PH		00	0232	None
0822	98IF		00	32	None
0822	98IG		00	00	None
0822	98IH		00	32	None
0822	98II		00	00	None
0822	99CD		00	0205	None
0822	99CH		00	32	None
0822	99CM		00	02	None
0822	99CO		00	00	None
<i>Plastic</i>					
0337		371 - 3 - 14	00	00	None
0337		371 - 4 - 9	00	02	None
0337		371 - 5 - 4	00	0264	None
0337		371 - 6 - 12	00	00	None
0337		371 - 15 - 8	00	00	None
0337		371 - 15 - 8	00	00	None
0337		371 - 15 - 17	00	00	None

ACCEPTABLE KNOWLEDGE
 TRU/TRM WASTE
 STREAM SUMMARIES

RMRS-WIPP-98-100
 REVISION 8
 PAGE 25

05/11/00

IDC	BWR Subpopulation	WSRIC Waste Stream	RCRA CCCs	Non-RCRA CCCs	EPA Hazardous Waste Numbers
0337		371 - 15 - 31	00	00	None
0337		371 - 15 - 107	00	70	None
0337		371 - 15 - 132	00	70	None
0337		371 - 15 - 152	00	00	None
0337		371 - 19 - 8	00	00	None
0337		371 - 19 - 9	00	00	None
0337		371 - 20 - 16	00	70	None
0337		371 - 21 - 28	00	00	None
0337		371 - 21 - 7	00	00	None
0337		371 - 21 - 16	00	70	None
0337		371 - 22 - 4	00	07	None
0337		371 - 23 - 17	00	00	None
0337		374 - 1 - 20	00	00	None
0337		374 - 2 - 21	00	00	None
0337		374 - 3 - 21	00	00	None
0337		374 - 6 - 9	00	00	None
0337		528 - 1 - 3	00	00	None
0337		559 - 1 - 8	00	00	None
0337		559 - 3 - 12	00	02	None
0337		559 - 4 - 3	00	00	None
0337		559 - 4 - 13	00	00	None
0337		559 - 4 - 58	00	00	None
0337		559 - 5 - 11	00	00	None
0337		559 - 5 - 33	00	00	None
0337		559 - 5 - 33	00	00	None
0337		559 - 6 - 1	00	00	None
0337		559 - 6 - 7	00	00	None
0337		559 - 6 - 22	00	00	None
0337		559 - 7 - 3	00	00	None
0337		559 - 7 - 15	00	00	None
0337		559 - 8 - 10	00	00	None
0337		559 - 8 - 56	00	00	None
0337		559 - 9 - 10	00	02	None
0337		559 - 9 - 13	00	00	None
0337		559 - 9 - 30	00	00	None
0337		559 - 11 - 9	00	00	None
0337		559 - 12 - 12	00	00	None
0337		559 - 14 - 2	00	02	None
0337		559 - 16 - 14	00	00	None
0337		559 - 16 - 22	00	00	None
0337		559 - 18 - 10	00	02	None
0337		559 - 21 - 6	00	02	None
0337		559 - 21 - 7	00	02	None
0337		559 - 22 - 7	00	02	None
0337		559 - 24 - 9	00	02	None
0337		559 - 24 - 14	00	00	None
0337		559 - 25 - 17	00	00	None
0337		559 - 28 - 3	00	02	None
0337		559 - 28 - 4	00	00	None
0337		559 - 28 - 19	00	00	None
0337		559 - 29 - 5	00	00	None

ACCEPTABLE KNOWLEDGE
 TRU/TRM WASTE
 STREAM SUMMARIES

RMRS-WIPP-98-100
 REVISION 8
 PAGE 26

05/11/00

IDC	BWR Subpopulation	WSRIC Waste Stream	RCRA CCCs	Non-RCRA CCCs	EPA Hazardous Waste Numbers
0337		559 - 29 - 19	00	00	None
0337		559 - 29 - 34	00	00	None
0337		559 - 30 - 8	00	00	None
0337		559 - 30 - 47	00	00	None
0337		559 - 30 - 58	00	00	None
0337		559 - 31 - 15	00	00	None
0337		559 - 31 - 36	00	00	None
0337		559 - 33 - 19	00	00	None
0337		559 - 35 - 10	00	02	None
0337		559 - 36 - 2	00	00	None
0337		559 - 38 - 9	00	00	None
0337		559 - 41 - 31	00	00	None
0337		559 - 42 - 9	00	02	None
0337		559 - 42 - 38	00	00	None
0337		559 - 43 - 3	00	00	None
0337		559 - 43 - 12	00	00	None
0337		559 - 44 - 2	00	00	None
0337		559 - 45 - 4	00	0102	None
0337		559 - 48 - 3	00	00	None
0337		559 - 49 - 4	00	00	None
0337		559 - 49 - 12	00	00	None
0337		559 - 50 - 4	00	00	None
0337		561 - 1 - 14	00	00	None
0337		707 - 1 - 31	00	00	None
0337		707 - 1 - 76	00	00	None
0337		707 - 2 - 27	00	00	None
0337		707 - 3 - 13	00	00	None
0337		707 - 30 - 14	00	00	None
0337		707 - 30 - 17	00	00	None
0337		707 - 30 - 18	00	00	None
0337		707 - 30 - 43	00	70	None
0337		707 - 33 - 5	00	00	None
0337		707 - 35 - 13	00	00	None
0337		707 - 35 - 14	00	00	None
0337		707 - 36 - 13	00	00	None
0337		707 - 36 - 14	00	00	None
0337		707 - 36 - 26	00	00	None
0337		707 - 36 - 34	00	70	None
0337		707 - 37 - 8	00	00	None
0337		707 - 38 - 3	00	00	None
0337		707 - 39 - 7	00	00	None
0337		707 - 40 - 3	00	00	None
0337		707 - 41 - 24	00	00	None
0337		707 - 42 - 7	00	00	None
0337		729 - 2 - 9	00	00	None
0337		771 - 23 - 6	00	00	None
0337		771 - 25 - 7	00	00	None
0337		771 - 27 - 3	00	00	None
0337		771 - 29 - 3	00	00	None
0337		771 - 31 - 2	00	00	None
0337		771 - 35 - 13	00	00	None

ACCEPTABLE KNOWLEDGE
 TRU/TRM WASTE
 STREAM SUMMARIES

RMRS-WIPP-98-100
 REVISION 8
 PAGE 27

05/11/00

IDC	BWR Subpopulation	WSRIC Waste Stream	RCRA CCCs	Non-RCRA CCCs	EPA Hazardous Waste Numbers
0337		771 - 35 - 16	00	00	None
0337		771 - 35 - 22	00	00	None
0337		771 - 35 - 23A	00	00	None
0337		771 - 35 - 24A	00	00	None
0337		771 - 35 - 42A	00	33	None
0337		771 - 35 - 54	00	00	None
0337		771 - 35 - 69	00	70	None
0337		771 - 35 - 70	00	70	None
0337		771 - 36 - 4	00	0205	None
0337		771 - 39 - 9	00	00	None
0337		774 - 7 - 15	00	00	None
0337		774 - 7 - 19	00	00	None
0337		774 - 8 - 2	00	00	None
0337		774 - 8 - 4	00	00	None
0337		774 - 9 - 2	00	0205	None
0337		776 - 1 - 28	00	00	None
0337		776 - 3 - 30	00	00	None
0337		776 - 13 - 42	00	00	None
0337		776 - 14 - 4	00	00	None
0337		776 - 14 - 32	00	00	None
0337		777 - 17 - 7	00	00	None
0337		777 - 23 - 12	00	00	None
0337		777 - 24 - 5	00	45	None
0337		776_777 - 1 - 12	00	00	None
0337		776_777 - 5 - 9	00	00	None
0337		776_777 - 5 - 22	00	00	None
0337		776_777 - 6 - 3	00	?? ¹	None
0337		776_777 - 6 - 20	00	00	None
0337		776_777 - 6 - 128	00	07	None
0337		776_777 - 9 - 3	00	00	None
0337		778 - 1 - 9	00	00	None
0337		779 - 2 - 19	00	00	None
0337		779 - 9 - 5	00	00	None
0337		779 - 23 - 9	00	00	None
0337		779 - 28 - 19	00	00	None
0337		779 - 37 - 10	00	00	None
0337		779 - 40 - 13	00	00	None
0337		779 - 40 - 25	00	00	None
0337		779 - 40 - 104	00	07	None
0337		779 - 40 - 110	00	70	None
0337		886 - 1 - 6	00	00	None
0337		886 - 2 - 12	00	00	None
0337		991 - 6 - 11	00	00	None
0337		D&D - 3 - 7	00	00	None
0337		D&D - 3 - 8	00	00	None
0337		D&D - 3 - 39	00	00	None
0337		D&D - 3 - 109	00	70	None
0337		D&D - 3 - 110	00	70	None
0337	52BH		00	02	None
0337	52BI		00	00	None
0337	52CP		00	00	None

05/11/00

IDC	BWR Subpopulation	WSRIC Waste Stream	RCRA CCCs	Non-RCRA CCCs	EPA Hazardous Waste Numbers
0337	52EQ		00	0205	None
0337	52FE		00	00	None
0337	52IY		00	0205	None
0337	52JE		00	00	None
0337	52JF		00	02	None
0337	52KY		00	00	None
0337	52LH		00	00	None
0337	52OX		00	00	None
0337	52PO		00	00	None
0337	52UK		00	00	None
0337	52YC		00	00	None
0337	52YL		00	182039	None
0337	98JP		00	00	None
0337	98KP		00	00	None
0337	99CY		00	00	None
0825	52AK		00	0205	None
0825	52AM		00	0205	None
0825	52BV		00	00	None
0825	52BX		00	02	None
0825	52ET		00	02	None
0825	52EU		00	0205	None
0825	52EV		00	00	None
0825	52JC		00	00	None
0825	52KB		00	00	None
0825	52LR		00	00	None
0825	52PS		00	202739	None
0825	98JQ		00	00	None
0825	99CV		00	0205	None
0825	99CX		00	00	None
<i>Super Compacted Combustible Waste</i>					
2216		776_777 - 5 - 18	00	00	None
2216	52NS		00	00	None

Notes:

1. The constituents in this waste stream vary and are determined on a case-by-case basis. The "???" is replaced by the actual chemical constituent code on the Waste/Residue Traveler.

6.1.5 Radionuclides

Table 6-4 presents the radionuclides potentially present in TRU combustible and plastic wastes.⁽³⁾

Table 6-4, Combustible and Plastic Waste Radionuclides

IDC	Description	Radionuclides ^{1,2,3}	Rationale
330 821	Dry Combustibles	WG Pu, Am-241, DU, EU, Np-237, U-233	IDC generated in nearly every TRU building; radionuclides dependent on generation process
336 822	Wet Combustibles	WG Pu, Am-241, DU, EU, Np-237, U-233	IDC generated in every TRU building; radionuclides dependent on generation process
337 825	Plastic	WG Pu, Am-241, DU, EU, Np-237, U-233	IDC generated in nearly every TRU building; radionuclides dependent on generation process
2216	Super Compacted Combustible Waste (821, 822, 825)	WG Pu, Am-241, DU, EU, Np-237, U-233	IDC generated from compaction of combustibles from any process within the PA.

Key: WG Pu weapons-grade plutonium EU enriched uranium
 Am-241 americium-241 Np-237 neptunium-237
 DU depleted uranium U-233 uranium-233

Notes:

1. Only waste generated before 1986 may contain Np-237 because processing of this material was discontinued at this time.
2. Only waste generated before 1983 may contain U-233 because processing of this material was discontinued at this time.
3. Am-241 is indicated only for IDCs (unless notes otherwise) in which americium operations were performed (e.g., molten salt extraction). Am-241 is not indicated if it is expected to be present only due to plutonium-241 decay.

6.1.6 References

1. DOE 1999. TRUPACT-II Content Codes (TRUCON), Revision 12. DOE/WIPP 89-004.
2. DOE 1995. Transuranic Waste Baseline Inventory Report, Revision 2. DOE/CAO-95-1121.
3. RMRS 1999. RFETS TRU Waste Acceptable Knowledge Supplemental Information. RF/RMRS-97-018, Revision 6.
4. RFETS. 1999. Solid Radioactive Waste Packaging, 4-D99-WO-1100, Revision 1.
5. RFETS 1999. Backlog Waste Reassessment Baseline Book. Waste Form 52, Combustibles.
6. Waste and Environmental Management System (WEMS) database.
7. RMRS 1999. Interoffice Memorandum from Jeff Harrison to TWCP Records. JLH-009-1999. November 1.
8. K-H 1999. Kaiser-Hill Interoffice Memorandum from K. P. Ferrera to G. A. O'Leary. KPF-014-99. April 15.
9. RMRS 1999. Interoffice Memorandum from Jeff Harrison to Eric D'Amico. JLH-010-1999. November 1.